Every part of the Apocynum when wounded emits copiously a milky juice. When chewed, the root communicates an unpleasant and intensely bitter taste. It exhibits, when dry, the following chemical phænomena.—If a solution in ether be mixed with alcohol, the alcohol, though not turbid at first, becomes so when the ether evaporates. An aqueous infusion or decoction is of a deep red colour and intensely bitter. A solution in alcohol is nearly destitute of colour, but retains the whole bitterness of the plant, and is not disturbed by the addition of water. When submitted to distillation a slight oily film floats on the surface of water in the receiver.—From these facts we may conclude that the Apocynum contains, 1. A bitter extractive principle. 2. A colouring principle soluble in water and not in alcohol. 3. Caoutchouc. 4. A volatile oil.

In various parts of the Eastern States this plant has been shewn to me by country practitioners under the name of *Ipecac*. This name is applied to it from its power of acting on the stomach in the same manner as the Brazilian emetic. Several physicians, among whom is Dr. Richardson of Medway, inform me that they have found about thirty grains of the root to evacuate the contents of the stomach as effectually as two

thirds the quantity of Ipecacuanha. In my own trials it has appeared to me much less powerful than the latter substance, and although it produces vomiting, yet this power is diminished by keeping, and appears to be eventually destroyed by age. When used for the purpose of an emetic, the recently powdered root should be employed.

The sensible and chemical qualities of this root seem to promise a good effect when given in small doses as a tonic medicine to the stomach. My observations on this subject may hereafter be more mature. *(See Appendix.)* We have certainly very few indigenous vegetables which exceed the Apocynum in bitterness. Perhaps its emetic property when given in large doses may be owing to this quality. Most bitter vegetables produce vomiting when administered in large quantities.

Kalm observes in his travels in North America, that in some parts of the country this plant was suspected of poisonous properties like those of the Rhus vernix. The country people informed him that the milky juice rubbed on the hands produced blistering in many persons, and that some were affected in the same way even by the effluvium of the plant.—I know of no other authority than that stated above for the existence of such a property in the Apocynum. The plant is